STATE OF HAWAII

ANNUAL PUBLIC WATER SYSTEM

COMPLIANCE REPORT

CALENDAR YEAR 2005

July 1, 2006

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I. The National Drinking Water Program

Overview. The EPA established the Public Water System Supervision (PWSS) Program under the authority of the 1974 Safe Drinking Water Act (SDWA). Under the SDWA and the 1986 and 1996 Amendments, EPA sets national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCLs) and Maximum Residual Disinfectant Levels (MRDLs). For some contaminants, EPA establishes treatment techniques in lieu of an MCL to control unacceptable levels in water. The Agency also regulates how often public water systems (PWSs) monitor their water for contaminants and report the monitoring results to the states or EPA. Generally, the larger the population served by a water system, the more frequent the monitoring and reporting (M/R) requirements. In addition, EPA requires PWSs to monitor for unregulated contaminants to provide data for future regulatory development. Finally, EPA requires PWSs to notify their consumers when they have violated these regulations. The 1996 Amendments to the SDWA require consumer notification to include a clear and understandable explanation of the nature of the violation, its potential adverse health effects, steps that the PWS is undertaking to correct the violation and the possibility of alternative water supplies during the violation.

The SDWA applies to the 50 states, the District of Columbia, Indian Lands, Puerto Rico, the Virgin Islands, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands.

The SDWA allows states and territories to seek EPA approval to administer their own PWSS Programs. The authority to run a PWSS Program is called primary enforcement authority or primacy. For a state to receive primacy, EPA must determine that the state meets certain requirements laid out in the SDWA and the regulations, including the adoption of drinking water regulations that are at least as stringent as the Federal regulations and a demonstration that they can enforce the program requirements. EPA can also set other requirements for states to meet in order to qualify and maintain primacy. Once a state receives primacy, it has the responsibility to administer all applicable terms of the National Primary Drinking Water Regulations with EPA oversight. In addition, EPA can provide federal funding to states that have been given primacy.

The 1986 SDWA Amendments gave Indian Tribes the right to apply for and receive primacy. EPA currently administers PWSS Programs on all Indian lands except the Navaho Nation, which was granted primacy in late 2000.

Under the authority given to it by Congress through the Safe Drinking Water Act and its amendments, EPA promulgates National Primary Drinking Water Regulations (NPDWR) to assure the safety of drinking water at the national level. The NPDWR is made up of a series of individual regulations which address specific concerns in drinking water. As new concerns are developed, new regulations can be added to the NPDWR. Most new regulations address specific contaminants or drinking water issues and contains its own set of monitoring and reporting requirements, MCLs and treatment techniques. Other regulations set forth requirements for informing the public about drinking water quality. States must adopt each new rule along with a set of primacy requirements in order to attain primary enforcement authority for that rule. EPA is also required to reassess its existing MCLs periodically as well as continually assess new contaminants for regulation.

The table below lists the rules which EPA currently enforces and their effective dates:

RULE	PROMULGATION DATE	EFFECTIVE DATE[1]
Total Coliform Rule	6/29/1989	12/31/1990
Surface Water Treatment Rule	6/29/1989	12/31/1990
Phase I Volatile Organic Chemical Rule	7/8/1987	1/9/1989
Lead and Copper Rule	6/7/1991	12/7/1992
Phase II Synthetic Organic/Inorganic Chemical Rule	1/30/1991	1/1/1993
Phase V Synthetic Organic/Inorganic Chemical Rule	7/17/1992	1/1/1993
Consumer Confidence Reports Rule	8/19/1998	10/19/1999
Unregulated Contaminant Monitoring Rule	9/17/1999	1/1/2001
Interim Enhanced Surface Water Treatment Rule	12/16/1998	1/1/2002
Lead and Copper Rule Minor Revisions	9/20/1999	4/11/2000
LT1 Enhanced Surface Water Treatment Rule	1/14/2002	2/13/2002
Stage 1 Disinfectant/Disinfection By-Products Rule	1/16/1998	2/16/1999
Public Notification Rule	5/4/2000	6/5/2000
Revised Radionuclides Rule	12/7/2000	12/8/2003
Arsenic and Clarifications to Compliance and New Source Monitoring Rule	1/22/2001	1/23/2006
Filter Backwash Rule	6/8/2001	6/8/2004
LT2 Enhanced Surface Water Treatment Rule	1/5/2006	3/6/2006
Stage 2 disinfectant/Disinfection By-Products Rule	1/5/2006	3/6/2006

In addition, EPA has several rules at various stages of development, including: the Groundwater Rule; the Radon Rule; and revisions of the Lead and Copper Rule and the Total Coliform Rule.

For the purpose of better understanding this report, the following terms are defined:

Annual State PWS Report. Each quarter, primacy states submit data to the Safe Drinking Water Information System (SDWIS/FED), an automated database maintained by EPA. The data submitted include, but are not limited to, PWS inventory information, the incidence of Maximum Contaminant Level, Maximum Residual Disinfectant Level, monitoring, and treatment technique violations; and information on enforcement activity related to these violations. Section 1414(c)(3) of the Safe Drinking Water Act requires states to provide EPA with an annual report of violations of the primary drinking water standards. This report provides the numbers of

violations in each of five categories: MCLs, treatment techniques, variances and exemptions, significant monitoring violations, and significant consumer notification violations and will be made part of the national compliance report.

Public Water System. A Public Water System (PWS) is defined as a system that provides water via piping or other constructed conveyances for human consumption to at least 15 service connections or serves an average of at least 25 people for at least 60 days each year. There are three types of PWSs. PWSs can be community (such as towns), nontransient noncommunity (such as schools or factories), or transient noncommunity systems (such as rest stops or parks). For this report when the acronym “PWS” is used, it means systems of all types unless specified in greater detail.

Maximum Contaminant Level. Under the Safe Drinking Water Act (SDWA), the EPA sets national limits for specific contaminants in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCLs).

Maximum Residual Disinfectant Level. The EPA sets national limits on residual disinfectant levels in drinking water to reduce the risk of exposure to disinfectant byproducts formed, when public water systems add chemical disinfectant for either primary or residual treatment. These limits are known as Maximum Residual Disinfectant Levels (MRDLs).

Treatment Techniques. For some regulations, the EPA establishes treatment techniques (TTs) in lieu of an MCL to control unacceptable levels of certain contaminants. For example, treatment techniques have been established for viruses, some bacteria, and turbidity.

Monitoring. A PWS is required to monitor and verify that the levels of contaminants present in the water do not exceed the MCL. If a PWS fails to have its water tested as required or fails to report test results correctly to the primacy agent, a monitoring violation occurs.

Significant Monitoring Violations. For this report, significant monitoring violations are generally defined as any Significant monitoring violation that occurred during the calendar year of the report. A Significant monitoring violation, with rare exceptions, occurs when no samples were taken or no results were reported during a compliance period.

Consumer Notification. Every Community Water System is required to deliver to its customers a brief annual water quality report. This report is to include some educational material, and will provide information on the source water, the levels of any detected contaminants, and compliance with drinking water regulations.

Significant Consumer Notification Violations. For this report, a significant public notification violation occurred if a community water system completely failed to provide its customers the required annual water quality report.

Variances and Exemptions. A primacy state can grant a PWS a variance from a primary drinking water regulation if the characteristics of the raw water sources reasonably available to the PWS do not allow the system to meet the MCL. To obtain a variance, the system must agree to install the best available technology, treatment techniques, or other means of limiting drinking water contamination that the Administrator finds are available (taking costs into

account), and the state must find that the variance will not result in an unreasonable risk to public health. The variance shall be reviewed not less than every 5 years to determine if the system remains eligible for the variance.

A primacy state can grant an exemption temporarily relieving a PWS of its obligation to comply with an MCL, treatment technique, or both if the system's noncompliance results from compelling factors (which may include economic factors) and the system was in operation on the effective date of the MCL or treatment technique requirement. The state will require the PWS to comply with the MCL or treatment technique as expeditiously as practicable, but not later than 3 years after the otherwise applicable compliance date.

II. HAWAII 2005 DRINKING WATER COMPLIANCE

Hawaii's annual compliance report is based on state records. 131 public water systems were regulated in Hawaii as of December 31, 2005.

Violations. A summary of the 2005 drinking water MCL, treatment technique, and significant monitoring/reporting violations is shown in Appendix A. The table in the appendix is organized by contaminant type: organic and inorganic contaminants, radionuclides, total coliform rule, surface water treatment rule, and lead and copper rule. A summary of the violations, listed by water system, is provided in Appendix B.

The state issued violation letters to all systems which incurred violations in 2005. The purveyors subsequently issued public notices to inform the public of the violations. This year, as in 2004, under the terms of the Stage 1 Disinfectant/Disinfection By-Products Rule, the MCL for haloacetic acids (HAA5s) of 0.060 mg/l and a reduced MCL for trihalomethanes (THMs) of 0.080 mg/l which became effective (January 1, 2004) for all surface water systems serving less than 10,000 persons and for all groundwater systems regardless of service population. These MCLs had an impact on the compliance status of several of our systems.

There were no MCL, treatment technique, or significant monitoring/reporting violations for any of the 69 regulated under the **Phase I Volatile Organic Chemical, or Phases II and V Synthetic Organic/Inorganic Chemical Rules**.

There were eight MCL violations of the new **Disinfectant/Disinfection By-Products Rule** (DBPR) and three significant monitoring/reporting violations. A total of 3 water systems (all surface water systems) accumulated these eleven violations of the DBPR. Of the eight MCL violations, four were for exceedance of the MCL for trihalomethanes and four for exceedance of the MCL for haloacetic acids. The monitoring violations were for failure to measure for Total Organic Carbon and alkalinity.

There were no MCL or monitoring violations for **Nitrate/Nitrite** in 2005.

There were no MCL violations for **Radiological** contaminants in 2005.

There were three **Total Coliform Rule** MCL violations, and there was one monitoring and reporting violation. The monitoring violation was for failure to take a minimum of five

samples in the month following a routine coliform position.

In 2005, there were 28 treatment technique violations of the **Surface Water Treatment Rule**. Four systems incurred a total of twenty-eight monthly violations. The Kaluakoi water system, a surface water system, incurred nine monthly treatment technique violations (January - September) at which point the system had completed a compliant surface water treatment plant. The Pahala water system, a system with a source that has been determined to be groundwater under the direct influence of surface water, incurred 12 violations for failure to filter. The Kukuihaele Water System was determined to have groundwater under the direct influence of surface water during mid-2005, and incurred six monthly treatment technique violations. The Makawao Water System, a long time surface water treatment system incurred a treatment technique violation for exceeding the turbidity MCL.

There were no violations in 2005 of the **Lead and Copper Rule** for treatment technique. However four water systems incurred significant monitoring/reporting violations when it was discovered that the laboratory they had used to meet their monitoring requirement had allowed its certification for lead and copper analyses to lapse.

In 2005, every community water complied with the **Consumer Confidence Rule** (CCR) to deliver an annual water quality or consumer confidence report.

In 2005, no new **variances or exemptions** were granted by the State of Hawaii, and no variances and exemptions were already in existence. Therefore, there were no violations of variances or exemptions.

Summary.

For 2005, the Hawaii Safe Drinking Water Branch identified a total of 47 violations for MCL, treatment technique, and significant monitoring or reporting. This represents a substantial decrease over the 71 violations issued in 2004. The decrease however, is after a year in which 30 monitoring violations were issued for failure to perform radiological monitoring.

In Hawaii, a substantial majority of the public water systems use groundwater as their source of water. Out of a total of 131 regulated public water systems, only 11 are classified as surface water systems. Due to their open nature, surface water systems are much more vulnerable to contamination by overland flow of runoff and therefore surface source waters characteristically contain more microbes and organic matter than groundwater systems. Surface systems are therefore more highly regulated than groundwater systems, including more stringent filtration requirements. Surface water systems are therefore faced with a significantly larger number of potential violations. On the other hand, the same open air nature that makes them less vulnerable to the kinds of contaminants that can be aerated from the water such as volatile organic chemicals and radon (a proposed future regulated contaminant).

The following table compares the number of MCL, treatment and significant monitoring/reporting violations by type of water system (groundwater or surface water). Other violations such as monitoring and reporting violations are independent of the type of water source.

Rule Name	MCL/TT Violations.	GW MCL/TT Violations	S W MCL/TT Violations	Total Mon/Rep Violations	Total Violations
Phases I, II, &V	0	0	0	0	0
DBPR	8	0	8	3	11
Nitrate/Nitrite	0	0	0	0	0
Radiological	0	0	0	0	0
TCR	2	2	0	2	4
SWTR	28	0	28	0	28
LCR	0	0	0	4	4
Total Violations	38	2	36	9	47

As you can see, surface water systems are more vulnerable to MCL and treatment technique violations as well as DBPR MCLs. Surface water systems incurred a total of 36 out of 38 (95%) of such violations.

Obtaining a Copy of the 2005 Annual Public Water System Compliance Report.

As required by the Safe Drinking Water Act, Hawaii has made the 2005 Annual Public Water System Compliance Report available to the public. Interested individuals can obtain a copy of the 2005 Annual Public Water System Compliance Report for Hawaii by accessing:

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State:	Hawaii
Reporting Interval:	2005

	MCL (mg/?)[1]	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Organic Contaminants							
1,1,1-Trichloroethane	**0.2**	**0**	**0**			**0**	**0**
1,1,2-Trichloroethane	**.005**	**0**	**0**			**0**	**0**
1,1-Dichloroethylene	**0.007**	**0**	**0**			**0**	**0**
1,2,4-Trichlorobenzene	**.07**	**0**	**0**			**0**	**0**
1,2-Dibromo-3-chloropropane (DBCP)	**0.0002**	**0**	**0**			**0**	**0**
1,2-Dichloroethane	**0.005**	**0**	**0**			**0**	**0**
1,2-Dichloropropane	**0.005**	**0**	**0**			**0**	**0**
2,3,7,8-TCDD (Dioxin)	**$3x10^{-8}$**	**0**	**0**			**0**	**0**
2,4,5-TP	**0.05**	**0**	**0**			**0**	**0**
2,4-D	**0.07**	**0**	**0**			**0**	**0**
Acrylamide				**0**	**0**		
Alachlor	**0.002**	**0**	**0**			**0**	**0**
Atrazine	**0.003**	**0**	**0**			**0**	**0**
Benzene	**0.005**	**0**	**0**			**0**	**0**
Benzo[a]pyrene	**0.0002**	**0**	**0**			**0**	**0**

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	MCL (mg/?)[1]	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Carbofuran	**0.04**	**0**	**0**			**0**	**0**
Carbon tetrachloride	**0.005**	**0**	**0**			**0**	**0**
Chlordane	**0.002**	**0**	**0**			**0**	**0**
cis-1,2-Dichloroethylene	**0.07**	**0**	**0**			**0**	**0**
Dalapon	**0.2**	**0**	**0**			**0**	**0**
Di(2-ethylhexyl)adipate	**0.4**	**0**	**0**			**0**	**0**
Di(2-ethylhexyl)phthalate	**0.006**	**0**	**0**			**0**	**0**
Dichloromethane	**0.005**	**0**	**0**			**0**	**0**
Dinoseb	**0.007**	**0**	**0**			**0**	**0**
Diquat	**0.02**	**0**	**0**			**0**	**0**
Endothall	**0.1**	**0**	**0**			**0**	**0**
Endrin	**0.002**	**0**	**0**			**0**	**0**
Epichlorohydrin				**0**	**0**		
Ethylbenzene	**0.7**	**0**	**0**			**0**	**0**
Ethylene dibromide	**0.00005**	**0**	**0**			**0**	**0**
Glyphosate	**0.7**	**0**	**0**			**0**	**0**
Heptachlor	**0.0004**	**0**	**0**			**0**	**0**

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	MCL (mg/?)[1]	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Heptachlor epoxide	**0.0002**	**0**	**0**			**0**	**0**
Hexachlorobenzene	**0.001**	**0**	**0**			**0**	**0**
Hexachlorocyclopentadiene	**0.05**	**0**	**0**			**0**	**0**
Lindane	**0.0002**	**0**	**0**			**0**	**0**
Methoxychlor	**0.04**	**0**	**0**			**0**	**0**
Monochlorobenzene	**0.1**	**0**	**0**			**0**	**0**
o-Dichlorobenzene	**0.6**	**0**	**0**			**0**	**0**
Oxamyl (Vydate)	**0.2**	**0**	**0**			**0**	**0**
para-Dichlorobenzene	**0.075**	**0**	**0**			**0**	**0**
Pentachlorophenol	**0.001**	**0**	**0**			**0**	**0**
Picloram	**0.5**	**0**	**0**			**0**	**0**
Simazine	**0.004**	**0**	**0**			**0**	**0**
Styrene	**0.1**	**0**	**0**			**0**	**0**
Tetrachloroethylene	**0.005**	**0**	**0**			**0**	**0**
Toluene	**1**	**0**	**0**			**0**	**0**
Total polychlorinated biphenyls	**0.0005**	**0**	**0**			**0**	**0**

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	MCL (mg/?)[1]	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Toxaphene	**0.003**	**0**	**0**			**0**	**0**
trans-1,2-Dichloroethylene	**0.1**	**0**	**0**			**0**	**0**
Trichloroethylene	**0.005**	**0**	**0**			**0**	**0**
Vinyl chloride	**0.002**	**0**	**0**			**0**	**0**
Xylenes (total)	**10**	**0**	**0**			**0**	**0**
HAA5	**0.060**	**4**	**2**				
Total trihalomethanes	**0.080**	**4**	**2**				

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	MCL (mg/?)[1]	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Inorganic Contaminants							
Antimony	**0.006**	**0**	**0**			**0**	**0**
Arsenic	**0.01**	**0**	**0**			**0**	**0**
Asbestos	**7 million fibers/? ? 10 ?m long**	**0**	**0**			**0**	**0**
Barium	**2**	**0**	**0**			**0**	**0**
Beryllium	**0.004**	**0**	**0**			**0**	**0**
Cadmium	**0.005**	**0**	**0**			**0**	**0**
Chromium	**0.1**	**0**	**0**			**0**	**0**
Cyanide (as free cyanide)	**0.2**	**0**	**0**			**0**	**0**
Fluoride	**4.0**	**0**	**0**			**0**	**0**
Mercury	**0.002**	**0**	**0**			**0**	**0**
Nitrate	**10 (as Nitrogen)**	**0**	**0**			**0**	**0**
Nitrite	**1 (as Nitrogen)**	**0**	**0**			**0**	**0**
Selenium	**0.05**	**0**	**0**			**0**	**0**

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	MCL (mg/?)[1]	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Thallium	**0.002**	**0**	**0**			**0**	**0**
Total nitrate and nitrite	**10 (as Nitrogen)**	**0**	**0**			**0**	**0**

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	MCL (mg/?)[1]	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Radionuclide MCLs							
Gross alpha	**15 Pci/?**	**0**	**0**			**0**	**0**
Radium-226 and radium-228	**5 Pci/?**	**0**	**0**			**0**	**0**
Gross beta	**4 mrem/yr**	**0**	**0**			**0**	**0**
Uranium	**30 ?g/L**	**0**	**0**			**0**	**0**
Subtotal		**0**	**0**			**0**	**0**

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	MCL (mg/?)[1]	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Total Coliform Rule							
Acute MCL violation	**Presence**	**0**	**0**				
Non-acute MCL violation	**Presence**	**3**	**3**				
Major routine and follow up monitoring						**1**	**1**
Sanitary survey[2]						**0**	**0**
Subtotal		**3**	**3**			**1**	**1**

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	MCL (mg/?)[1]	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Surface Water Treatment Rule							
Filtered systems							
Monitoring, routine/repeat							
Treatment techniques				**28**	**4**		
Unfiltered systems							
Monitoring, routine/repeat						**0**	**0**
Failure to filter				**0**	**0**		
Subtotal				**28**	**4**	**0**	**0**

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Reporting Interval:	2005

	MCL (mg/?)[1]	MCLs		Treatment Techniques		Significant Monitoring/Reporting	
		Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations	Number of Violations	Number of Systems With Violations
Lead and Copper Rule							
Initial lead and copper tap M/R						**4**	**4**
Follow-up or routine lead and copper tap M/R						**0**	**0**
Treatment installation				**0**	**0**		
Public education				**0**	**0**		
Subtotal				**0**	**0**	**4**	**4**

1. Values are in milligrams per liter (mg/?), unless otherwise specified.

2. Number of major monitoring violations for sanitary survey under the Total Coliform Rule.

Definitions for Summary of Violations Table

The following definitions apply to the Summary of Violations table.

Filtered Systems: Water systems that have installed filtration treatment [40 CFR 141, Subpart H].

Inorganic Contaminants: Non-carbon-based compounds such as metals, nitrates, and asbestos. These contaminants are naturally-occurring in some water, but can get into water through farming, chemical manufacturing, and other human activities. EPA has established MCLs for 15 inorganic contaminants [40 CFR 141.62].

Lead and Copper Rule: This rule established national limits on lead and copper in drinking water [40 CFR 141.80-91]. Lead and copper corrosion pose various health risks when ingested at any level, and can enter drinking water from household pipes and plumbing fixtures. States report violations of the Lead and Copper Rule in the following six categories:

Initial lead and copper tap M/R: A violation where a system did not meet initial lead and copper testing requirements, or failed to report the results of those tests to the State.

Follow-up or routine lead and copper tap M/R: A violation where a system did not meet follow-up or routine lead and copper tap testing requirements, or failed to report the results.

Treatment installation: Violations for a failure to install optimal corrosion control treatment system or source water treatment system which would reduce lead and copper levels in water at the tap. [One number is to be reported for the sum of violations in both categories].

Lead service line replacement: A violation for a system's failure to replace lead service lines on the schedule required by the regulation.

Public education: A violation where a system did not provide required public education about reducing or avoiding lead intake from water.

Maximum Contaminant Level (MCL): The highest amount of a contaminant that EPA allows in drinking water. MCLs ensure that drinking water does not pose either a short-term or long-term health risk. MCLs are defined in milligrams per liter (parts per million) unless otherwise specified.

Monitoring: EPA specifies which water testing methods the water systems must use, and sets schedules for the frequency of testing. A water system that does not follow EPA's schedule or methodology is in violation [40 CFR 141].

States must report monitoring violations that are significant as determined by the EPA Administrator and in consultation with the States. For purposes of this report, significant monitoring violations are major violations and they occur when no samples are taken or no results are reported during a compliance period. A major monitoring violation for the surface water treatment rule occurs when at least 90% of the required samples are not taken or results are not reported during the compliance period.

Organic Contaminants: Carbon-based compounds, such as industrial solvents and pesticides. These contaminants generally get into water through runoff from cropland or discharge from factories. EPA has set legal limits on 54 organic contaminants that are to be reported [40 CFR 141.61].

Radionuclides: Radioactive particles which can occur naturally in water or result from human activity. EPA has set legal limits on four types of radionuclides: radium-226, radium-228, gross alpha, and beta particle/photon radioactivity [40 CFR 141]. Violations for these contaminants are to be reported using the following three categories:

Gross alpha: A violation for alpha radiation above MCL of 15 picocuries/liter. Gross alpha includes radium-226 but excludes radon and uranium.

Combined radium-226 and radium-228: A violation for combined radiation from these two isotopes above MCL of 5 Pci/L.

Gross beta: A violation for beta particle and photon radioactivity from man-made radionuclides above 4 millirem/year.

Reporting Interval: The reporting interval for violations to be included in this PWS Annual Compliance Report, which is to be submitted to EPA by July 1, 2005, is from January 1, 2004 through December 31, 2004.

SDWIS Code: Specific numeric codes from the Safe Drinking Water Information System (SDWIS) have been assigned to each violation type included in this report. The violations to be reported include exceeding contaminant MCLs, failure to comply with treatment requirements, and failure to meet monitoring and reporting requirements. Four-digit SDWIS Contaminant Codes have also been included in the chart for specific MCL contaminants.

Surface Water Treatment Rule: The Surface Water Treatment Rule establishes criteria under which water systems supplied by surface water sources, or ground water sources under the direct influence of surface water, must filter and disinfect their water [40 CFR 141, Subpart H]. Violations of the "Surface Water Treatment Rule" are to be reported for the following four categories:

Monitoring, routine/repeat (for filtered systems): A violation for a system's failure to carry out required tests, or to report the results of those tests.

Treatment techniques (for filtered systems): A violation for a system's failure to properly treat its water.

Monitoring, routine/repeat (for unfiltered systems): A violation for a system's failure to carry out required water tests, or to report the results of those tests.

Failure to filter (for unfiltered systems): A violation for a system's failure to properly treat its water. Data for this violation code will be supplied to the States by EPA.

Total Coliform Rule (TCR): The Total Coliform Rule establishes regulations for microbiological contaminants in drinking water. These contaminants can cause short-term health problems. If no samples are collected during the one month compliance period, a significant monitoring violation occurs. States are to report four categories of violations:

Acute MCL violation: A violation where the system found fecal coliform or E. coli, potentially harmful bacteria, in its water, thereby violating the rule.

Non-acute MCL violation: A violation where the system found total coliform in samples of its water at a frequency or at a level that violates the rule. For systems collecting fewer than 40 samples per month, more than one positive sample for total coliform is a violation. For systems collecting 40 or more samples per month, more than 5% of the samples positive for total coliform is a violation.

Major routine and follow-up monitoring: A violation where a system did not perform any monitoring. [One number is to be reported for the sum of violations in these two categories.]

Sanitary Survey: A major monitoring violation if a system fails to collect 5 routine monthly samples if sanitary survey is not performed.

Treatment Techniques: A water disinfection process that EPA requires instead of an MCL for contaminants that laboratories cannot adequately measure. Failure to meet other operational and system requirements under the Surface Water Treatment and the Lead and Copper Rules have also been included in this category of violation for purposes of this report.

Unfiltered Systems: Water systems that do not need to filter their water before disinfecting it because the source is very clean [40 CFR, Subpart H].

Violation: A failure to meet any state or federal drinking water regulation.

2005						date note.	Comments
pws	date	qtr	sysname	type	Vio type	letter	
DBPR violations							
215	0503	05Q1	Upper Kula	C	HAA5 MCL	4/28/05	
215	0506	05Q2	Upper Kula	C	HAA5 MCL	4/28/05	
231	0503	05Q1	Maunaloa	C	D/DBPR M/R	9/21/05	
231	0503	05Q1	Maunaloa	C	THM MCL	3/3/05	
231	0506	05Q2	Maunaloa	C	D/DBPR M/R	9/21/05	
231	0509	05Q3	Maunaloa-Kaluakoi	C	DBPR M/R	11/3/05	
231	0512	05Q4	Maunaloa-Kaluakoi	C	THM MCL	11/10/05	
236	0503	05Q1	Kaluakoi	C	HAA5 MCL	3/31/05	
236	0503	05Q1	Kaluakoi	C	THM MCL	3/3/05	
236	0506	05Q2	Kaluakoi	C	HAA5 MCL	9/14/05	
236	0506	05Q2	Kaluakoi	C	THM MCL	5/26/05	
		Total DBPR violations = 11			**No. of systems in violation = 3**		
TCR Violations							
146	0505	05Q2	Hawaii Volcanoes	C	TCR MCL	5/18/05	
160	0510	05Q4	Lalamilo	C	TCR M/R	11/7/05	
237	0502	05Q1	Lanai City	C	TCR MCL	2/11/05	
330	0506	05Q2	Sheraton	NT	TCR M/R	8/26/05	
		Total TCR violations = 4			**No. of systems in violation = 4**		
SWTR violations							
109		05Q1-4	Pahala	C	SWTR TT	12 monthly	
133		05Q3-4	Kuikuihaele	C	SWTR TT	6 monthly	
213	0510	05Q4	Makawao	C	SWTR TT	11/10/05	
236		05Q1-3	Kaluakoi	C	SWTR TT	9 monthly	
		Total SWTR violations = 28			**No. of systems in violation = 4**		
Pb/Cu violations							
341	0512	03 - 05	Ft. Shafter	C	Pb/Cu M/R	4/7/06	
345	0512	03 - 05	Schofield	C	Pb/Cu M/R	4/7/06	
346	0512	03 - 05	Tripler	C	Pb/Cu M/R	4/7/06	
370	0512	03 - 05	Palehua Solar Obs.	NT	Pb/Cu M/R	4/7/06	
		Total Pb/Cu violations = 4			**No. of systems in violation = 4**		
TOTAL VIOLATIONS = 47					**TOTAL SYSTEMS IN VIOLATION = 14**		